Case No. N0186US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	
Michael V. Shuman, et al.	Examiner Christian E. Rendon
Serial No. 10/798,632	Group Art Unit No. 3714
Filing Date: March 11, 2004	
For: GEOGRAPHIC AREA TEMPLATES FOR COMPUTER GAMES	

APPEAL BRIEF (37 CFR § 41.37)

Mail Stop: Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in accordance with 37 CFR § 41.37 and is filed in furtherance of the Notice of Appeal filed February 27, 2009.

I. Real Party in Interest

The real party in interest is NAVTEQ North America, LLC (formerly Navigation Technologies Corporation), a wholly-owned, indirect subsidiary of Nokia Corporation, a publicly-traded corporation that has its headquarters in Finland.

II. Related Appeals and Interferences

There have not been and are no pending appeals, interferences, or judicial proceedings that may be related to, directly effect, or be directly affected by or have bearing on the Board's decision in this appeal.

III. Status of Claims

1. Claims 42-80 are present and pending in the application. Claims 1-41 have been previously canceled.

2. Claims 42-47, 51-64, 66-72, and 74-78 have been finally rejected under 35 U.S.C. §103(a) as being unpatentable over Huston, et al. (U.S. 6,146,143) in view of Lechner (U.S. 2003/0059743). Claims 48-50, 65, 73, and 79-80 have been finally rejected under 35 U.S.C. §103(a) as being unpatentable over Huston, et al. in view of Lechner and Graf, et al. (U.S. 4,645,459).

3. The rejections of claims 42-80 are being appealed.

IV. Status of Amendments

A Response and Amendment F was filed (on December 31, 2008) subsequent to the final rejection mailed November 12, 2008. In the Response and Amendment F, a minor amendment was made to claim 43, but the Examiner did not accept the amendment asserting a need for a new search. Accordingly, claim 43 does not include the amendment made in the Response and Amendment F for this appeal.

V. Summary of Claimed Subject Matter

There are five (5) independent claims involved in this appeal: Claims 42, 59, 60, 68, and 76. In addition, there are thirty four (34) dependent claims involved in this appeal: Claims 43-58, 61-67, 69-75, and 77-80.

Independent claim 42 relates to a method for facilitating game development (*e.g.*, Figure 2 (reference 101 and reference 130), Figure 5 (reference 101 and reference 130), and Figure 8 (reference 101 and reference 130); page 6, line 9 – page 7, line 23; page 12, line 19 – page 13, line 4; and page 16, line 13 – page 17, line 10). The method includes producing, by a map developer, a source geographic database containing data representing a real-world locale including (i) geographic coordinates of positions of roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape (*e.g.*, Figure 1 (reference 100 and reference 102) and Figure 2 (reference 101); page 4, line 3 – page 5, line 4; page 9, lines 3-5; and page 13, lines 14-18). Another step of the method is transforming, by the map developer, the data representing the real-world locale into data representing an imaginary geographic locale to form a template geographic database (*e.g.*, Figure 3 (reference 208 and reference 224) and Figure 6 (reference 308 and reference 224); page 7, line 24 – page 11, line 4 and page 12, lines 22-30). The method also includes storing, by the map developer, the template geographic database on a computer-readable medium (*e.g.*, Figure 2 (reference 200) and Figure 3 (reference 222); page 7, lines 12-23). A further step of the method includes providing, by the map developer to a game developer, the computer-readable medium containing the template geographic database, the game developer being separate from the map developer (*e.g.*, Figure 2 (reference 101 and reference 130) and

Figure 4 (reference 222); page 7, lines 10-15 and page 11, lines 5-8. Also, the template geographic database is used by the game developer along with other computer-game components to form a computer game (*e.g.*, Figure 2 (reference 130 and reference 132), Figure 4 (reference 130, reference 190, and reference 222), and Figure 7 (reference 130); page 11, line 9 – page 12, line 17 and page 15, line 24 – page 16, line 10).

Independent claim 59 relates to a computer-readable medium containing computer-executable instructions for performing a method for facilitating game development (*e.g.*, Figure 2 (reference 101 and reference 130), Figure 5 (reference 101 and reference 130), and Figure 8 (reference 101 and reference 130); page 6, line 9 – page 7, line 23; page 12, line 19 – page 13, line 4; and page 16, line 13 – page 17, line 10). The method includes producing, by a map developer, a source geographic database containing data representing a road network in a real-world locale (*e.g.*, Figure 1 (reference 100 and reference 102) and Figure 2 (reference 101); page 4, line 3 – page 5, line 4), wherein the data representing the road network include navigation-related attributes for digital route calculation and digital route guidance about the road network (*e.g.*, Figure 2 (reference 102 and reference 112); page 6, line 16 – page 7, line 9). Another step of the method is transforming, by the map developer, at least some data from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale (*e.g.*, Figure 3 (reference 208 and reference 224) and Figure 6 (reference 308 and reference 224); page 7, line 24 – page 11, line 4 and page 12, lines 22-30). The method also includes storing, by the map developer, the template geographic database on a computer-readable medium (*e.g.*, Figure 2 (reference 200) and Figure 3 (reference 222); page 7, lines 12-23), wherein the template geographic database is used for generating a computer game (*e.g.*, Figure 2 (reference 130 and reference 132), Figure 4

(reference 130 and reference 222), and Figure 7 (reference 130); page 11, line 9 – page 12, line 17 and page 15, line 24 – page 16; line 10).

Independent claim 60 relates to a method for facilitating game development (*e.g.*, Figure 2 (reference 101 and reference 130), Figure 5 (reference 101 and reference 130), and Figure 8 (reference 101 and reference 130); page 6, line 9 – page 7, line 23; page 12, line 19 – page 13, line 4; and page 16, line 13 – page 17, line 10). The method includes producing a source geographic database containing data representing a plurality of road segments corresponding to a road network in a real-world locale (*e.g.*, Figure 1 (reference 100, reference 102, and reference 120) and Figure 2 (reference 100); page 4, line 3 – page 5, line 4; page 10, lines 12-14; and page 13, lines 14-18 and lines 27-30). Another step of the method is transforming the data representing the plurality of road segments into data representing an imaginary geographic locale to form a template geographic database (*e.g.*, Figure 3 (reference 208 and reference 224) and Figure 6 (reference 308 and reference 224); page 7, line 24 – page 11, line 4 and page 12, lines 22-30). The method also includes storing the template geographic database on a computer-readable medium (*e.g.*, Figure 2 (reference 200) and Figure 3 (reference 222); page 7, lines 12-23), wherein the template geographic database is used for generating a computer game (*e.g.*, Figure 2 (reference 130 and reference 132), Figure 4 (reference 130 and reference 222), and Figure 7 (reference 130); page 11, line 9 – page 12, line 17 and page 15, line 24 – page 16, line 10).

Independent claim 68 relates to a method for facilitating game development (*e.g.*, Figure 2 (reference 101 and reference 130), Figure 5 (reference 101 and reference 130), and Figure 8 (reference 101 and reference 130); page 6, line 9 – page 7, line 23; page 12, line 19 – page 13, line 4; and page 16, line 13 – page 17, line 10). The method includes producing a source

geographic database containing data representing a plurality of road segments corresponding to a real-world locale (*e.g.*, Figure 1 (reference 100, reference 102, and reference 120) and Figure 2 (reference 100); page 4, line 3 – page 5, line 4; page 10, lines 12-14; and page 13, lines 14-18 and lines 27-30), wherein the data representing the plurality of road segments are configured to be compiled for navigation related functions in a vehicle navigation device (*e.g.*, Figure 2 (reference 102 and reference 112); page 6, line 16 – page 7, line 9). Another step of the method is transforming at least some data representing the plurality of road segments from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale (*e.g.*, Figure 3 (reference 208 and reference 224) and Figure 6 (reference 308 and reference 224); page 7, line 24 – page 11, line 4 and page 12, lines 22-30). The method also includes storing the template geographic database on a computer-readable medium (*e.g.*, Figure 2 (reference 200) and Figure 3 (reference 222); page 7, lines 12-23), wherein the template geographic database is used for generating a computer game (*e.g.*, Figure 2 (reference 130 and reference 132), Figure 4 (reference 130 and reference 222), and Figure 7 (reference 130); page 11, line 9 – page 12, line 17 and page 15, line 24 – page 16, line 10).

Independent claim 76 relates to a method for facilitating game development (*e.g.*, Figure 2 (reference 101 and reference 130), Figure 5 (reference 101 and reference 130), and Figure 8 (reference 101 and reference 130); page 6, line 9 – page 7, line 23; page 12, line 19 – page 13, line 4; and page 16, line 13 – page 17, line 10). The method includes producing a source geographic database containing data corresponding to roads in a real world geographic locale including (i) geographic coordinates of positions of the roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road

connectivity, and (vi) road shape (*e.g.*, Figure 1 (reference 100 and reference 102) and Figure 2 (reference 100); page 4, line 3 – page 5, line 4; page 9, lines 3-5; and page 13, lines 14-18). Another step of the method is transforming data representing a real-world road network structure from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary road network structure (*e.g.*, Figure 3 (reference 208 and reference 224) and Figure 6 (reference 308 and reference 224); page 7, line 24 – page 11, line 4 and page 12, lines 22-30), wherein said step of transforming includes at least one of modifying of the positions of the roads and changing the street names of the roads (*e.g.*, Figure 3 (reference 224 and reference 228); page 10, lines 10-29). The method also includes storing the template geographic database on a computer-readable medium (*e.g.*, Figure 2 (reference 200) and Figure 3 (reference 222); page 7, lines 12-23), wherein the template geographic database is used for generating a computer game (*e.g.*, Figure 2 (reference 130 and reference 132), Figure 4 (reference 130 and reference 222), and Figure 7 (reference 130); page 11, line 9 – page 12, line 17 and page 15, line 24 – page 16, line 10).

VI. Grounds of Rejection to be Reviewed on Appeal

1. At issue is whether Appellants' claims 42-47, 51-64, 66-72, and 74-78 are obvious and unpatentable under 35 U.S.C. §103(a) in view of Huston, et al. (U.S. 6,146,143) and Lechner (U.S. 2003/0059743).

2. At issue is whether Appellants' claims 48-50, 65, 73, and 79-80 are obvious and unpatentable under 35 U.S.C. §103(a) in view of Huston, et al. and Lechner and further in view of Graf, et al. (U.S. 4,645,459).

VII. Argument

"The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." MPEP § 2142. The Examiner has not provided adequate factual findings or rationale to support clear articulated reason(s) to reject the claims under the legal standard of obviousness.

Reversal of the Examiner's rejection of claims 42-80 is respectfully requested for the reasons set forth below.

1. The Examiner Erred in Rejecting claims 42-47, 51-64, 66-72, and 74-78 as being obvious in view of Houston, et al. and Lechner.

(a) Rejection of Independent Claim 42 and Dependent Claims 43-45 and 51-54

Claim 42 recites, *inter alia*, "producing, by a map developer, a source geographic database containing data representing a real-world locale including (i) geographic coordinates of positions of roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape," "transforming, by the map developer, the data representing the real-world locale into data representing an imaginary geographic locale to form a template geographic database," and "providing, by the map developer to a game developer, the computer-readable medium containing the template geographic database, the game developer being separate from the map developer." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features and does not render the claim as obvious.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). The computing means includes a database of a simulated environment representing a roadway network and areas bordering the roadway network. (Houston, et al., column 4, lines 38-42). The simulated roadway network in the database is preferably partitioned into highways, rural roads, and city streets, having features conventionally associated with each roadway to accurately simulate traveling thereon. (Houston, et al., column 4, lines 43-50).

Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract and paragraphs [0010]-[0012]). The Background section of Lechner, regarding manual generation, discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraph [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, even if one of ordinary skill in the art would have combined the features of Houston, et al. and Lechner, the combination does not teach or suggest or render obvious a source geographic database containing data representing a real-world locale including (i) geographic coordinates of positions of roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape.

On page 2 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that Houston, et al. disclose the claimed source geographic database and data thereof. However, the database of Houston, et al. stores visual images that are presented for a driving simulation. (Houston, et al., column 4, lines 20-50). For example, there is no teaching, suggestion, or mention of data including geographic coordinates of positions of roads. Houston et al, mention images and visual depictions of roads, not geographic coordinates of roads, such as latitude and longitude coordinates.

Furthermore, there is no teaching or suggestion of data representing address ranges along the roads. On page 2 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that address ranges of roads are conventionally associated with roadways. However, Houston, et al. use images of roadways to present a driving simulation, and the images may not include addresses of buildings, let alone full address ranges along roads. When driving down roads, addresses are often not visible to a driver, especially in commercial areas. There is no teaching or suggestion that the visual images in Houston, et al. include address ranges. Even if one address of one random building is shown in the visual images, that is not the same as data representing an address range along that road.

Also, there is no teaching or suggestion that street names of roads are also provided. For example, visual images used in Houston, et al. may be presented in such a way that may exclude street names or the roads that are being simulated may not include street name signs. (See Houston, et al., Figures 4, 5, 6, 7, and 11).

Additionally, Houston, et al. does not teach or suggest producing the source geographic database by a map developer that is separate from a game developer. Lechner discloses that a terrain model designer may obtain terrain source data from outside sources, such as the Joint

Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that these sources are map developers separate from the simulator or game developer of Houston, et al. However, it would not make sense for the simulator designer of Houston, et al. to obtain data from the sources described in Lechner because the sources of Lechner provide terrain source data used for flight simulation, not visual images along roadways for depicting accurate driving along streets.

Furthermore, there is no teaching, suggestion, or mention of transforming, by the map developer, the data representing the real-world locale into data representing an imaginary geographic locale to form a template geographic database. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. However, just because data that represents a portion of a real-world locale is provided does not mean data representing a real-world locale is transformed into an imaginary geographic locale. Whatever authorized data that is provided in Lechner, even if it only represents a portion of the real-world, still represents a real-world area, not an imaginary locale. For example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, and the United States Imagery and Geospatial Information Services, based on the disclosure, do not transform real-world terrain source data into data representing imaginary locales.

Claim 42 would not have been obvious in view of the cited references. Accordingly, reversal of the rejection of claim 42 is respectfully requested.

Claims 43-45 and 51-54 depend, directly or indirectly, from claim 42. The arguments regarding claim 42 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claims 43-45 and 51-54 is respectfully requested.

(b) Rejection of Independent Claim 59

Claim 59 recites, *inter alia*, "producing, by a map developer, a source geographic database containing data representing a road network in a real-world locale, wherein the data representing the road network include navigation-related attributes for digital route calculation and digital route guidance about the road network" and "transforming, by the map developer, at least some data from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features and does not render the claim as obvious.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). The computing means includes a database of a simulated environment representing a roadway network and areas bordering the roadway network. (Houston, et al., column 4, lines 38-42). The simulated roadway network in the database is preferably partitioned into highways, rural roads, and city streets, having features conventionally associated with each roadway to accurately simulate traveling thereon. (Houston, et al., column 4, lines 43-50).

Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract and paragraphs [0010]-[0012]). The Background section of Lechner, regarding manual generation, discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraph [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, there is no teaching, suggestion, or mention of navigation related attributes for digital route calculation and digital route guidance about a road network. On page 5 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that Lechner (Abstract) provides digital route guidance in the form of the mission route in the software and that Houston, et al. (Abstract) provide a digital route calculation by having the simulator operator control weather and traffic events.

Firstly, the mission route disclosed by Lechner relates to a path for flight simulation, not digital route guidance for a road network. Such mission route data would not be compatible or would not make sense to combine with the visual images of Houston, et al. for driving simulation, and the mission route would not provide guidance for road travel, such as turn-by-turn instructions on a road network. Secondly, Houston, et al. do not disclose digital route calculation and digital route guidance. For example, a person engaged in the simulation of Houston, et al. may experience traffic and different weather conditions, but there is no mention of the ability to conduct digital route calculation, such as entering address information to calculate a driving route to a destination, and there is no mention of digital route guidance, such

as providing turn-by-turn instructions and visuals to guide someone to the destination along the calculated driving route.

Furthermore, there is no teaching, suggestion, or mention of transforming, by the map developer, at least some data from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. However, just because data that represents a portion of a real-world locale is provided does not mean data representing a real-world locale is transformed into an imaginary geographic locale. Whatever authorized data that is provided in Lechner, even if it only represents a portion of the real-world, still represents a real-world area, not an imaginary locale. For example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, and the United States Imagery and Geospatial Information Services, based on the disclosure, do not transform real-world terrain source data into data representing imaginary locales.

Claim 59 would not have been obvious in view of the cited references. Accordingly, reversal of the rejection of claim 59 is respectfully requested.

(c) Rejection of Independent Claim 60 and Dependent Claims 62-63 and 66-67

Claim 60 recites, *inter alia*, "producing a source geographic database containing data representing a plurality of road segments corresponding to a road network in a real-world locale"

and "transforming the data representing the plurality of road segments into data representing an imaginary geographic locale to form a template geographic database." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features and does not render the claim as obvious.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). The computing means includes a database of a simulated environment representing a roadway network and areas bordering the roadway network. (Houston, et al., column 4, lines 38-42). The simulated roadway network in the database is preferably partitioned into highways, rural roads, and city streets, having features conventionally associated with each roadway to accurately simulate traveling thereon. (Houston, et al., column 4, lines 43-50).

Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract and paragraphs [0010]-[0012]). The Background section of Lechner, regarding manual generation, discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraph [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, neither of the cited references discloses a database containing data representing a plurality of road segments corresponding to a road network in a real-world locale. Houston, et

al. disclose images of roads that may be categorized into highways, rural roads, and city streets, but that is not the same as data representing road segments. For example, there is no mention of data representing individual segments that connect together to model a road or a portion thereof. Examiner Rendon does not even address the limitation of the plurality of road segments corresponding to a road network in a real-world locale in the Final Office Action dated November 12, 2008 or the Advisory Action dated February 10, 2009.

Furthermore, there is no teaching or suggestion of transforming the data representing the plurality of road segments into data representing an imaginary geographic locale to form a template geographic database. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. Firstly, sending authorized data depicting a portion of the world is not the same as transforming data representing a plurality of road segments into data representing an imaginary geographic locale. The references do not mention or suggest transforming road segments, let alone data representing road segments. Secondly, whatever authorized data that is provided in Lechner, even if it only represents a portion of the real-world, still represents a real-world area, not an imaginary locale. For example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, and the United States Imagery and Geospatial Information Services, based on the disclosure, do not transform real-world terrain source data into data representing imaginary locales.

Claim 60 would not have been obvious in view of the cited references. Accordingly, reversal of the rejection of claim 60 is respectfully requested.

Claims 62-63 and 66-67 depend, directly or indirectly, from claim 60. The arguments regarding claim 60 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claims 62-63 and 66-67 is respectfully requested.

(d) Rejection of Independent Claim 68 and Dependent Claims 69-71 and 74-75

Claim 68 recites, *inter alia*, "producing a source geographic database containing data representing a plurality of road segments corresponding to a real-world locale, wherein the data representing the plurality of road segments are configured to be compiled for navigation related functions in a vehicle navigation device" and "transforming at least some data representing the plurality of road segments from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features and does not render the claim as obvious.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). The computing means includes a database of a simulated environment representing a roadway network and areas bordering the roadway network. (Houston, et al., column 4, lines 38-42). The simulated roadway network in the database is preferably partitioned into highways, rural roads, and city streets, having features conventionally associated with each roadway to accurately simulate traveling thereon. (Houston, et al., column 4, lines 43-50).

Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract and paragraphs [0010]-[0012]). The Background section of Lechner, regarding manual generation, discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraph [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, neither Lechner nor Houston, et al. disclose data representing a plurality of road segments, let alone data representing a plurality of road segments that are configured to be compiled for navigation related functions in a vehicle navigation device. In the Final Office Action dated November 12, 2008 or the Advisory Action dated February 10, 2009, Examiner Rendon does not address these specific limitations. Houston, et al. discloses presenting a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment, but that is not the same as data representing a plurality of road segments that are configured to be compiled for navigation related functions in a vehicle navigation device. There is no mention of use of a vehicle navigation device or data thereof for navigation related functions, such as calculating a driving route and providing turn-by-turn instructions and guidance to a destination.

Furthermore, there is no teaching or suggestion of transforming at least some data representing the plurality of road segments from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale. On page 3 of the Final Office Action dated

November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. Firstly, sending authorized data depicting a portion of the world is not the same as transforming data representing a plurality of road segments into data representing an imaginary geographic locale. The references do not mention or suggest transforming road segments, let alone data representing road segments. Secondly, whatever authorized data that is provided in Lechner, even if it only represents a portion of the real-world, still represents a real-world area, not an imaginary locale. For example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, and the United States Imagery and Geospatial Information Services, based on the disclosure, do not transform real-world terrain source data into data representing imaginary locales.

Claim 68 would not have been obvious in view of the cited references. Accordingly, reversal of the rejection of claim 68 is respectfully requested.

Claims 69-71 and 74-75 depend, directly or indirectly, from claim 68. The arguments regarding claim 68 appropriately apply to the dependent claims as well. Accordingly, reversal of the rejections of claims 69-71 and 74-75 is respectfully requested.

(e) Rejection of Independent Claim 76

Claim 76 recites, *inter alia*, "producing a source geographic database containing data corresponding to roads in a real world geographic locale including (i) geographic coordinates of positions of the roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape" and

"transforming data representing a real-world road network structure from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary road network structure, wherein said step of transforming includes at least one of modifying of the positions of the roads and changing the street names of the roads." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features and does not render the claim as obvious.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). The computing means includes a database of a simulated environment representing a roadway network and areas bordering the roadway network. (Houston, et al., column 4, lines 38-42). The simulated roadway network in the database is preferably partitioned into highways, rural roads, and city streets, having features conventionally associated with each roadway to accurately simulate traveling thereon. (Houston, et al., column 4, lines 43-50).

Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract and paragraphs [0010]-[0012]). The Background section of Lechner, regarding manual generation, discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraph [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the

Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, the combination of the references does not teach or suggest or render obvious a source geographic database containing data corresponding to roads in a real world geographic locale including (i) geographic coordinates of positions of the roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape.

On page 2 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that Houston, et al. disclose the claimed source geographic database and data thereof. However, the database of Houston, et al. stores visual images that are presented for a driving simulation. (Houston, et al., column 4, lines 20-50). For example, there is no teaching, suggestion, or mention of data including geographic coordinates of positions of roads. Houston et al, mention images and visual depictions of roads, not geographic coordinates of roads, such as latitude and longitude coordinates.

Furthermore, there is no teaching or suggestion of data representing address ranges along the roads. On page 2 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that address ranges of roads are conventionally associated with roadways. However, Houston, et al. use images of roadways to present a driving simulation, and the images may not include addresses of buildings, let alone full address ranges along roads. When driving down roads, addresses are often not visible to a driver, especially in commercial areas. There is no teaching or suggestion that the visual images in Houston, et al. include address ranges. Even if one address of one random building is shown in the visual images, that is not the same as data representing an address range along that road.

Also, there is no teaching or suggestion that street names of roads are also provided. For example, visual images used in Houston, et al. may be presented in such a way that may exclude street names or the roads that are being simulated may not include street name signs. (See Houston, et al., Figures 4, 5, 6, 7, and 11).

Additionally, there is no teaching, suggestion, or mention of transforming data representing a real-world road network structure from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary road network structure. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. Firstly, sending authorized terrain data depicting a portion of the world for a flight simulation is not the same as transforming data representing a real-world road network structure into data representing an imaginary road network structure. The references do not mention or suggest transforming a road network structure. Secondly, whatever authorized data that is provided in Lechner, even if it only represents a portion of the real-world, still represents a real-world area, not an imaginary locale. For example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, and the United States Imagery and Geospatial Information Services, based on the disclosure, do not transform real-world terrain source data into data representing imaginary locales.

Also, neither Lechner nor Houston, et al. disclose that transforming includes at least one of modifying positions of the roads and changing the street names of the roads. Just because the

teachings of Lechner mention that terrain source data may be obtained from external electronic collections does not change the fact that data representing the real-world is still being used in the simulations. Lechner and Houston, et al. do not suggest modifying positions of roads or changing the street names of the roads to form a template database representing an imaginary road network structure.

Claim 76 would not have been obvious in view of the cited references. Accordingly, reversal of the rejection of claim 76 is respectfully requested.

(f) Rejection of Dependent Claims 46 and 77

Claim 46 depends from claim 42, and the arguments regarding claim 42 appropriately apply to claim 46 as well. Claim 77 depends from claim 76, and the arguments regarding claim 76 appropriately apply to claim 77 as well.

Furthermore, claims 46 and 77 recite, *inter alia*, "selecting a characteristic geographic parameter of the source geographic database," "using the selected characteristic geographic parameter and at least some data from the source geographic database when forming the template geographic database," and "wherein the template geographic database has a characteristic geographic parameter similar to the characteristic geographic parameter of the source geographic database." The combination of the cited references (Houston, et al. and Lechner) does not teach or suggest at least these features.

On page 4 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that paragraph [0007] of Lechner teaches selecting a characteristic from a source database to create a template with a similar characteristic. Paragraph [0007] of Lechner discloses that a terrain model designer may obtain terrain source data from electronic collections

of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. However, even if the electronic collections provide a portion of terrain source data, that is not the same as selecting a characteristic geographic parameter of the source geographic database and using the selected characteristic geographic parameter and at least some data from the source geographic database when forming the template geographic database (which represents an imaginary geographic locale via a transformation). There is no mention of selection of a characteristic geographic parameter that is to be similar between the source geographic database and the template geographic database.

Accordingly, reversal of the rejection of claim 46 and claim 77 is respectfully requested.

(g) Rejection of Dependent Claims 47 and 78

Claim 47 depends (indirectly through claim 46) from claim 42, and the arguments regarding claims 42 and 46 appropriately apply to claim 47 as well. Claim 78 depends (indirectly through claim 77) from claim 76, and the arguments regarding claims 76 and 77 appropriately apply to claim 78 as well.

Furthermore, claims 47 and 78 recite, *inter alia*, "wherein the selected characteristic geographic parameter is selected from the set consisting of: road density, road width, expressway density, roadway orientation, road alignment, altitude changes, points of interest, buildings, and signs."

On page 4 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that the system disclosed by Huston, et al. illustrates road density, road shape, road width and that column 4, lines 44-49 disclose that the simulated road network may include

features conventionally associated with roadways. However, the combination of Huston, et al. with Lechner would not teach or suggest that the specific features of Huston, et al., (*e.g.*, visual road width) would be used as a characteristic geographic parameter selected by a terrain data source (such as the Joint Services Imaging Processing Station) to form a template geographic database, in which the template geographic database represents an imaginary locale with road widths similar to the source geographic database of the terrain data source. The disclosure of Lechner does not suggest that terrain data sources would select a characteristic geographic parameter for creating a template geographic database in a transformation process, let alone using, for example, a road width or other specific road or geographic characteristics to be the characteristic geographic parameter.

Accordingly, reversal of the rejection of claim 47 and claim 78 is respectfully requested.

(h) Rejection of Dependent Claims 55-57

Claims 55-57 depend from claim 42. The arguments regarding claim 42 appropriately apply to claims 55-57 as well.

Furthermore, claims 55-57 recite, *inter alia*, that the map developer combines data in the template geographic database with 3D model data. Lechner discloses that a terrain model designer may obtain terrain source data from outside sources, such as the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world

resulting in an imaginary geographic locale. However, there is no teaching or suggestion that the terrain data sources of Lechner would combine 3D model data with terrain source data, and it would not make sense for the terrain data sources of Lechner to do so.

Accordingly, reversal of the rejection of claims 55-57 is respectfully requested.

(i) Rejection of Dependent Claim 58

Claim 58 depends from claim 42. The arguments regarding claim 42 appropriately apply to claims 58 as well.

Furthermore, claim 58 recites, *inter alia*, "insuring, by the map developer, data integrity in the template geographic database, wherein insuring data integrity comprises checking road connectivity." Lechner discloses that a terrain model designer may obtain terrain source data from outside sources, such as the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. On page 3 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that when the outside sources of Lechner ("the map developer") send terrain source data to a simulator developer, only authorized data depicting a portion of the world is provided, and, thus, the boundaries of the authorized portion misrepresent the real world resulting in an imaginary geographic locale. However, there is no teaching or suggestion that the terrain data sources of Lechner would insure data integrity by checking road connectivity.

Accordingly, reversal of the rejection of claim 58 is respectfully requested.

(j) Rejection of Dependent Claim 61

Claim 61 depends from claim 60. The arguments regarding claim 60 appropriately apply to claim 61 as well.

Furthermore, claim 61 recites, *inter alia*, "wherein the data representing the plurality of road segments is not imagery data that correspond to visual appearances of roads." The cited references (Houston, et al. and Lechner) do not disclose or mention data representing road segments, let alone data representing road segments that are not imagery data that correspond to visual appearances of roads. Actually, Houston, et al. specifically disclose the use of visual images as road data to provide a driving simulation, which is opposite of the claimed feature.

Accordingly, reversal of the rejection of claim 61 is respectfully requested.

(k) Rejection of Dependent Claim 64

Claim 64 depends from claim 60. The arguments regarding claim 60 appropriately apply to claim 64 as well.

Furthermore, claim 64 recites, *inter alia*, "wherein data representing each of the plurality of road segments is associated with geographic coordinates and an address range." The cited references (Houston, et al. and Lechner) do not disclose or mention data representing road segments, let alone geographic coordinates and an address range associated with respective data representing each of the road segments.

Accordingly, reversal of the rejection of claim 64 is respectfully requested.

(l) Rejection of Dependent Claim 72

Claim 72 depends from claim 68. The arguments regarding claim 68 appropriately apply to claim 72 as well.

Furthermore, claim 72 recites, *inter alia*, "wherein transforming comprises modifying a substantial portion of the data representing the plurality of road segments corresponding to a city of the real-world locale." The cited references (Houston, et al. and Lechner) do not disclose or mention data representing road segments, let alone modifying a substantial portion of data representing a plurality of road segments corresponding to a city of a real-world locale.

Accordingly, reversal of the rejection of claim 72 is respectfully requested.

2. The Examiner Erred in Rejecting claims 48-50, 65, 73, and 79-80 as being obvious in view of Huston, et al., Lechner, and Graf, et al.

(a) Rejection of Dependent Claims 48-49

Claims 48-49 depend, indirectly through claim 46, from claim 42. The arguments regarding claim 42 and claim 46 appropriately apply to claims 48-49 as well.

Accordingly, reversal of the rejection of claims 48-49 is respectfully requested.

(b) Rejection of Dependent Claims 79-80

Claims 79-80 depend, indirectly through claim 77, from claim 76. The arguments regarding claim 76 and claim 77 appropriately apply to claims 79-80 as well.

Accordingly, reversal of the rejection of claims 79-80 is respectfully requested.

(c) Rejection of Dependent Claim 50

Claim 50 depends from claim 42. The arguments regarding claim 42 appropriately apply to claim 50 as well.

Furthermore, claim 50 recites, *inter alia*, "wherein transforming comprises applying an operation selected from the set consisting of: altering a location of a road segment, moving locations of roads by varying distances, switching a relative vertical ordering of roads that cross one another at different elevations, and performing horizontal or rotational transformations of locations of roads." Houston, et al. and Lechner do not disclose at least these features. However, on page 7 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that these features are disclosed in Graf, et al.

Graf, et al. disclose a computer generated synthesized imagery ("CGSI") system that allows a scene to be constructed by placing high fidelity objects on a specified surface or background. (Graf, et al., column 2, lines 50-60). The system is used for generating simulator gaming areas, which may be fictitious. (Graf, et al., column 4, lines 40-50). The system uses an object library, which normally comprises photographic matter, to store images from individual real-world elements for use in generating a gaming area. (Graf, et al., column 6, lines 53-57). Object, surface, or special-effects processing is used to change a stored image in normal straight-on perspective to scene conditions. (Graf, et al., column 8, lines 14-21).

Firstly, Graf, et al. disclose changing a stored image in terms of perspective, not altering a location of a road segment or switching an ordering of roads relative to a real-world setting. Secondly, even if one of ordinary skill in the art would have combined the teachings of Graf, et al. with the teachings of Houston, et al. and Lechner, there is still no teaching or suggestion that the map developer (the external electronic collections that provide source terrain data of

Lechner) would do any sort of changing to the source data it is providing. The changing of perspective disclosed by Graf, et al. would occur by the game or simulator developer, not the separate map developer.

Accordingly, reversal of the rejection of claim 50 is respectfully requested.

(d) Rejection of Dependent Claims 65 and 73

Claim 65 depends from claim 60, and the arguments regarding claim 60 appropriately apply to claim 65 as well. Claim 73 depends, indirectly through claim 72, from claim 68, and the arguments regarding claims 68 and 72 appropriately apply to claim 73 as well.

Furthermore, claims 65 and 73 recite, inter alia, "wherein modifying comprises an operation selected from the set consisting of: altering a location of a road segment, moving locations of road segments by varying distances, switching a relative vertical ordering of road segments that cross one another at different elevations, and performing horizontal or rotational transformations of locations of road segments." Houston, et al. and Lechner do not disclose at least these features. However, on page 7 of the Final Office Action dated November 12, 2008, Examiner Rendon asserted that these features are disclosed in Graf, et al.

Graf, et al. disclose a computer generated synthesized imagery ("CGSI") system that allows a scene to be constructed by placing high fidelity objects on a specified surface or background. (Graf, et al., column 2, lines 50-60). The system is used for generating simulator gaming areas, which may be fictitious. (Graf, et al., column 4, lines 40-50). The system uses an object library, which normally comprises photographic matter, to store images from individual real-world elements for use in generating a gaming area. (Graf, et al., column 6, lines 53-57).

Object, surface, or special-effects processing is used to change a stored image in normal straight-on perspective to scene conditions. (Graf, et al., column 8, lines 14-21).

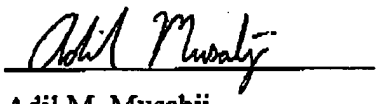
However, Graf, et al. does not mention data representing road segments, let alone modifying road segments. Also, Graf, et al. disclose changing a stored image in terms of perspective, not altering a location of a road segment or switching an ordering of road segments relative to a real-world setting.

Accordingly, reversal of the rejection of claims 65 and 73 is respectfully requested.

Conclusion

Appellants respectfully submit that the rejections of claims 42-80 raised by the Examiner were in error for at least the reasons set forth above. Accordingly, reversal of all grounds of rejection is respectfully requested.

Respectfully submitted,



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VIII. Claims Appendix

42. A method for facilitating game development, the method comprising:

producing, by a map developer, a source geographic database containing data representing a real-world locale including

(i) geographic coordinates of positions of roads,

(ii) street names of the roads,

(iii) address ranges along the roads,

(iv) turn restrictions at intersections of the roads,

(v) road connectivity, and

(vi) road shape;

transforming, by the map developer, the data representing the real-world locale into data representing an imaginary geographic locale to form a template geographic database;

storing, by the map developer, the template geographic database on a computer-readable medium; and

providing, by the map developer to a game developer, the computer-readable medium containing the template geographic database, the game developer being separate from the map developer;

wherein the template geographic database is used by the game developer along with other computer-game components to form a computer game.

43. The method of claim 42 wherein the source geographic database comprises attributes suitable for providing navigation-related functions for a real-world road network.

44. The method of claim 43 wherein the template geographic database provides a level of accuracy similar to a level of accuracy provided by the source geographic database for navigation-related functions.

45. The method of claim 43 wherein the template geographic database provides a level of detail similar to a level of detail provided by the source geographic database for navigation-related functions.

46. The method of claim 42 wherein transforming comprises:

selecting a characteristic geographic parameter of the source geographic database; and

using the selected characteristic geographic parameter and at least some data from the source geographic database when forming the template geographic database;

wherein the template geographic database has a characteristic geographic parameter similar to the characteristic geographic parameter of the source geographic database.

47. The method of claim 46 wherein the selected characteristic geographic parameter is selected from the set consisting of: road density, road width, expressway density, roadway orientation, road alignment, altitude changes, points of interest, buildings, and signs.

48. The method of claim 46 wherein the selected characteristic geographic parameter comprises geographic features selected from the set consisting of: lakes, rivers, and mountains.

49. The method of claim 46 wherein the selected characteristic geographic parameter comprises open spaces selected from the set consisting of: parks and golf courses.

50. The method of claim 42 wherein transforming comprises applying an operation selected from the set consisting of: altering a location of a road segment, moving locations of roads by varying distances, switching a relative vertical ordering of roads that cross one another at different elevations, and performing horizontal or rotational transformations of locations of roads.

51. The method of claim 42 wherein the computer-readable medium is selected from the set consisting of: a magnetic disk, an optical disk, RAM, ROM, and a network transmission.

52. The method of claim 42 wherein providing the computer-readable medium containing the template geographic database comprises applying a technique selected from the set consisting of: selling the computer-readable medium and leasing the computer-readable medium.

53. The method of claim 42 wherein the other computer-game components include at least one of the set consisting of: characters, game logic, vehicles, game rules, and programs for rendering and graphics.

54. The method of claim 42 further comprising:

combining, by the map developer, data in the template geographic database with road-model data to provide a realistic visual appearance of roads in the imaginary geographic locale, wherein the road-model data comprise an element selected from the set consisting of: road pavement colors, lane stripe markings, curbs, sidewalks, signs, lampposts, lane dividers, traffic signals, speed bumps, and crosswalks.

55. The method of claim 42 further comprising:

combining, by the map developer, data in the template geographic database with 3D model data to provide a realistic visual representation of polygon-shaped features in the imaginary geographic locale.

56. The method of claim 42 further comprising:

combining, by the map developer, data in the template geographic database with 3D model data to provide a realistic visual representation of cityscape and landscape features in the imaginary geographic locale.

57. The method of claim 42 further comprising:

combining, by the map developer, data in the template geographic database with 3D model data to provide a realistic visual representation of an element selected from the set consisting of: buildings, fences, trees, shrubbery, lawns, fences, and clouds.

58. The method of claim 42 further comprising:

insuring, by the map developer, data integrity in the template geographic database, wherein insuring data integrity comprises checking road connectivity.

59. A computer-readable medium containing computer-executable instructions for performing a method for facilitating game development, the method comprising:

producing, by a map developer, a source geographic database containing data representing a road network in a real-world locale, wherein the data representing the road network include navigation-related attributes for digital route calculation and digital route guidance about the road network;

transforming, by the map developer, at least some data from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale; and

storing, by the map developer, the template geographic database on a computer-readable medium, wherein the template geographic database is used for generating a computer game.

60. A method for facilitating game development, the method comprising:

producing a source geographic database containing data representing a plurality of road segments corresponding to a road network in a real-world locale;

transforming the data representing the plurality of road segments into data representing an imaginary geographic locale to form a template geographic database; and

storing the template geographic database on a computer-readable medium,

wherein the template geographic database is used for generating a computer game.

61. The method of claim 60 wherein the data representing the plurality of road segments is not imagery data that correspond to visual appearances of roads.

62. The method of claim 60 wherein the imaginary geographic locale does not represent the real-world locale but includes a characteristic similar to the real-world locale.

63. The method of claim 62 wherein the similar characteristic comprises a characteristic from the set consisting of: road density, road shape, road width, expressway density, roadway orientation, road alignment, altitude changes, points of interest, buildings, and signs.

64. The method of claim 60 wherein data representing each of the plurality of road segments is associated with geographic coordinates and an address range.

65. The method of claim 60 wherein transforming comprises applying an operation selected from the set consisting of: altering a location of a road segment, moving locations of road segments by varying distances, switching a relative vertical ordering of road segments that cross one another at different elevations, and performing horizontal or rotational transformations of locations of road segments.

66. The method of claim 60 further comprising:

combining data in the template geographic database with road-model data to provide a realistic visual appearance of roads in the imaginary geographic locale, wherein the road-model data comprise an element selected from the set consisting of: road pavement colors, lane stripe markings, curbs, sidewalks, signs, lampposts, lane dividers, traffic signals, speed bumps, and crosswalks.

67. The method of claim 60 further comprising:

insuring data integrity in the template geographic database, wherein insuring data integrity comprises checking road segment connectivity.

68. A method for facilitating game development, the method comprising:

producing a source geographic database containing data representing a plurality of road segments corresponding to a real-world locale, wherein the data representing the plurality of road segments are configured to be compiled for navigation related functions in a vehicle navigation device;

transforming at least some data representing the plurality of road segments from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale; and

storing the template geographic database on a computer-readable medium, wherein the template geographic database is used for generating a computer game.

69. The method of claim 68 wherein producing the source geographic database and transforming to form the template geographic database is implemented by the same entity.

70. The method of claim 68 wherein the imaginary geographic locale does not represent the real-world locale but includes a characteristic similar to the real-world locale.

71. The method of claim 70 wherein the similar characteristic comprises a characteristic from the set consisting of: road density, road shape, road width, expressway density, roadway orientation, road alignment, altitude changes, points of interest, buildings, and signs.

72. The method of claim 68 wherein transforming comprises modifying a substantial portion of the data representing the plurality of road segments corresponding to a city of the real-world locale.

73. The method of claim 72 wherein modifying comprises an operation selected from the set consisting of: altering a location of a road segment, moving locations of road segments by varying distances, switching a relative vertical ordering of road segments that cross one another at different elevations, and performing horizontal or rotational transformations of locations of road segments.

74. The method of claim 68 further comprising:

combining data in the template geographic database with road-model data to provide a realistic visual appearance of roads in the imaginary geographic locale, wherein the road-model data comprise an element selected from the set consisting of: road pavement colors, lane stripe markings, curbs, sidewalks, signs, lampposts, lane dividers, traffic signals, speed bumps, and crosswalks.

75. The method of claim 68 further comprising:

insuring data integrity in the template geographic database, wherein insuring data integrity comprises checking road segment connectivity.

76. A method for facilitating game development, the method comprising:

producing a source geographic database containing data corresponding to roads in a real world geographic locale including

(i) geographic coordinates of positions of the roads,

(ii) street names of the roads,

(iii) address ranges along the roads,

(iv) turn restrictions at intersections of the roads,

(v) road connectivity, and

(vi) road shape;

transforming data representing a real-world road network structure from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary road network structure, wherein said step of transforming includes at least one of modifying of the positions of the roads and changing the street names of the roads; and

storing the template geographic database on a computer-readable medium, wherein the template geographic database is used for generating a computer game.

77. The method of claim 76 wherein transforming comprises:

selecting a characteristic geographic parameter of the source geographic database; and

using the selected characteristic geographic parameter and at least some data from the source geographic database when forming the template geographic database;

wherein the template geographic database has a characteristic geographic parameter similar to the characteristic geographic parameter of the source geographic database.

78. The method of claim 77 wherein the selected characteristic geographic parameter is selected from the set consisting of: road density, road width, expressway density, roadway orientation, road alignment, altitude changes, points of interest, buildings, and signs.

79. The method of claim 77 wherein the selected characteristic geographic parameter comprises geographic features selected from the set consisting of: lakes, rivers, and mountains.

80. The method of claim 77 wherein the selected characteristic geographic parameter comprises open spaces selected from the set consisting of: parks and golf courses.

IX. Evidence Appendix

None

X. Related Proceedings Appendix

None